

APC anti-human CD207 (Langerin)

Catalog # / Size: 2361030 / 100 tests
2361025 / 25 tests

Clone: 10E2

Isotype: Mouse IgG1, κ

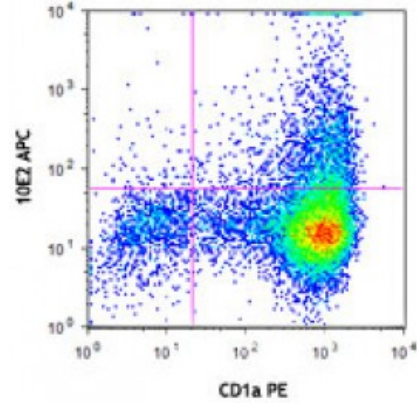
Immunogen: Primary human Langerhans cells

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific

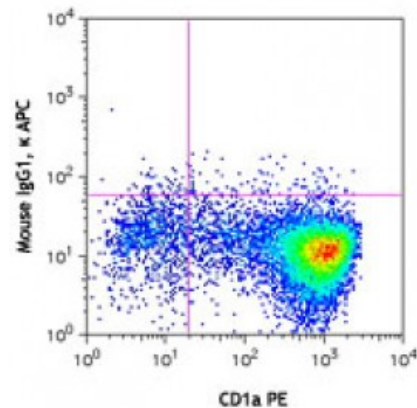


Human monocytes derived Langerhans cells (stimulated with GM-CSF, IL-4 and TGF- β) were stained with CD1a PE and CD207 (clone 10E2) APC (top) or mouse IgG1, κ APC isotype control (bottom).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



Application Notes: Additional reported application (for the relevant formats) includes: blocking the binding of HIV-1 to Langerhans cells¹.

Application References: 1. Witte LD, *et al.* 2007. *Nat. Med.* 13:367. (Block)

Description: CD207, also known as Langerin, is a 40 kD type II transmembrane cell glycoprotein which belongs to C-type lectin with mannose binding specificity. It is predominantly expressed on Langerhans cells and induces the formation of Birbeck granules, the Langerhans cell hallmark organelle. It is also found on several other subtypes of dendritic cells, such as dermal CD103-positive dendritic cells and splenic CD8-positive dendritic cells. Langerin is generally thought to be involved in antigen processing. Recently, it has been found that HIV captured by Langerin was internalized into Birbeck granule and degraded, which results in inhibition of HIV-1 infection and subsequent transmission.

Antigen 1. Valladeau J, *et al.* 2000. *Immunity* 12:71.

- References:**
2. Mc Dermott R, *et al.* 2002. *Mol. Biol. Cell.* 13:317.
 3. Mizumoto N, *et al.* 2004. *J. Clin. Invest.* 113:701.
 4. Witte LD, *et al.*